



Arbitration CAS 2010/A/2296 Simon Vroemen v. Koninklijke Nederlandse Atletiek Unie (KNAU) & Anti-Doping Autoriteit Nederland (ADAN), award of 12 September 2011

Panel: Prof. Massimo Coccia (Italy), President; Mr John Faylor (USA); Prof. Ulrich Haas (Germany)

Athletics (steeplechase)

Doping (methandienone)

Burden and standard of proof regarding departures from International Standards

Validity of sample collection and storage

Minor documentation defect

Transportation of sample

“Different analyst” rule

CAS scope of review regarding the validation of a detection method

Delivery of the Laboratory’s standard operating procedures (SOPs)

Purpose of the analysis of the B sample for a non-threshold substance

- 1. According to the applicable provisions of the Dutch Institute for Sports Law (ISR) Doping Regulations, when an adverse analytical finding is reported by a WADA-accredited laboratory, there is a presumption that the applicable International Standards were respected throughout the whole anti-doping process. The burden is thus on the athlete to establish, by a balance of probability, a departure from the International Standard for Testing (IST) or International Standard for Laboratories (ISL) either during the collection, handling and transport of the samples or during the analysis, custodial and review procedures in the laboratory. If the athlete does prove any such departure, the burden shifts back to the anti-doping organization to prove – to the comfortable satisfaction of the hearing body, bearing in mind the seriousness of the allegation which is made – that the departure did not cause the adverse analytical finding.**
- 2. Where on the balance of probability, an athlete’s allegations concerning the sample collection and storage procedure have not been proven, it must be concluded that the anti-doping test performed by the Doping Control Officer (DCO) on the athlete was properly carried out and that the samples were properly stored in accordance with the applicable collection procedures.**
- 3. A declaration signed by an athlete that s/he was satisfied with the sample collection procedure cures any minor documentation defect such as the absence on the Doping Control Form of the athlete’s address and sport discipline, which, as a consequence and in terms of the applicable rules, cannot even be regarded as a true “departure” from the IST.**

4. Three and half days between the end of the sample collection and the arrival of the sample at an accredited Lab does not constitute an unacceptable period of transport and certainly cannot be characterized as being “too long” in terms of the IST. This time-frame is arguably not ideal but it is in line with common testing practice, especially when sample collection occurs far away from a WADA-accredited laboratory.
5. No departure from ISL relating to the “different analyst rule” prohibiting the same person to participate in the A and B sample analysis can be retained if an athlete did not satisfy his/her burden of proof in this respect on the balance of probability.
6. A CAS panel cannot place in question whether an ISO accreditation was correctly attributed to a laboratory, because this would render the whole international standardization and certification system meaningless and because, notoriously, compliance with ISO accreditation requirements is regularly checked by external auditors. However, a CAS panel may certainly verify whether a given method used by a laboratory is covered by the accreditation or not. In any event, it is for an athlete to establish on a balance of probability, that either method is not validated for specificity.
7. No rule obliges an accredited Lab to deliver the Laboratory’s standard operating procedures (SOPs). In fact, pursuant to the WADA Technical Document TD2003LDOC, the Laboratory is not required to support an Adverse Analytical Finding by producing SOPs, general quality management documents (e.g., ISO compliance documents) or any other documents not specifically required. However, the above WADA provision does not and may not preclude a CAS panel, if the conditions set forth by article R44.3 of the CAS Code are met, from ordering an anti-doping organization to produce specified and relevant extracts from the SOPs of a WADA-accredited laboratory.
8. ISL provisions make clear that, in the case of a non-threshold substance, the laboratory method for analyzing the B sample is not aimed at having identical analytical results or at gaining information on the background or the quantification, but only at confirming the presence of the prohibited substance. In other terms, the ISL only requires the *identification* in the B sample of the same prohibited substance that was found in the A sample.

Mr. Simon Vroemen (the “Appellant” or the “Athlete”), born on 11 May 1969 in Delft (The Netherlands), is a Dutch long distance runner specializing in the steeplechase. He took part in two Olympic Games (Sydney 2000 and Athens 2004) and was formerly the men’s European 3000 m steeplechase record holder.

The Koninklijke Nederlandse Atletiek Unie (the “First Respondent” or the KNAU or the “Dutch Athletics Federation”) is the Dutch governing body for athletics. It has its headquarters in Arnhem, Netherlands.

The Anti-Doping Autoriteit Nederland (the “Second Respondent” or the ADAN) has its headquarters in Capelle aan den IJssel, Netherlands, and is the National Anti-Doping Organisation (NADO) for the Netherlands, so designated by the government of the Netherlands in accordance with the World Anti-Doping Code (WADC), whose definition of NADO so reads: *“The entity(ies) designated by each country as possessing the primary authority and responsibility to adopt and implement anti-doping rules, direct the collection of Samples, the management of test results, and the conduct of hearings, all at the national level. [...]”*.

This section of the award sets out a brief summary of the main relevant facts, as established on the basis of the parties’ written and oral submissions. Additional facts ascertained by the Panel are set out, where material, within other sections of this award.

In 2006 Mr. Vroemen publicly announced his retirement from elite sport and, as a consequence, he was no longer included in the Registered Testing Pool of the ADAN and the Registered Testing Pool of the International Association of Athletics Federation (IAAF) and was no longer tested in out-of-competition controls. However, in 2007 Mr. Vroemen resumed participating in a number of competitions.

On 11 June 2008, during the Internationales Lausitzer Leichtathletik Meeting in Cottbus, Germany, the Athlete obtained the time of 8:12.50 in the 3000 m steeplechase, sufficient to qualify him for the Beijing’s Olympic Games.

According to the rules of the Dutch Athletics Federation, an athlete who obtains a result which would qualify for the Olympic Games, and who, in fact, wishes to qualify, must undergo a doping control within 72 hours of the athlete’s relevant performance. In Mr. Vroemen’s case, such deadline was to elapse at 20:00 on 14 June 2008.

On 13 June 2008, the Athlete requested the ADAN to organize a doping control within the said time limit of 72 hours. After some difficulties in arranging a test on such short notice and close to the Athlete’s residence, the ADAN advised the Athlete that, on the basis of his availability, the out-of-competition test was to be performed in the Wolvega Hotel, Netherlands, on 14 June 2008 at the agreed time of 19:00.

On Saturday, 14 June 2008, between 19:15 and 19:30, Mr. Rob Moonen, the Doping Control Officer (DCO) instructed by the ADAN, collected Mr. Vroemen’s urine specimen. The Athlete declared on the Doping Control Form that he had consumed the following products: (i) on 11 June 2008, “Pulmicort”, for which he had a Therapeutic Use Exemption (TUE), (ii) on 11 June 2008, “Fixonase”, for which he also had a TUE, (iii) on 11 June 2008, “Aerius”, and (iv) on 14 June 2008, “Multivitaminen”. The Athlete also remarked on the form that the external container where the sample bottles were stored did not have a red seal.

After having finished the sample collection procedure, the DCO took the samples to his home and stored them into his refrigerator. Early in the morning on Monday, 16 June 2008, he shipped the samples through a courier company to the ADAN offices. The ADAN staff received the Athlete's samples on 17 June 2008 and forwarded them on the same day, again through a courier company, to the Institute of Biochemistry of the German Sport University of Cologne, Germany (the "Cologne Lab"), a laboratory accredited by the World Anti-Doping Agency (WADA).

The Cologne Lab received the Athlete's samples on 18 June 2008. On 26 June 2008, the Cologne Lab reported the presence of the prohibited substance "methandienone" – specifically, the methandienone metabolite #7 – in the A sample (code A1822545) collected from the Athlete on 14 June 2008.

After Mr. Vroemen was notified that his A Sample had yielded an adverse analytical finding, he asked for the analysis of his B Sample. The analysis of the B sample was conducted on 15 July 2008 in the presence of the Athlete himself and of his chosen expert Dr. Vreeken. The Cologne Lab reported that the B sample analysis confirmed the adverse analytical finding related to the metabolite #7 of methandienone.

On 21 July 2008, the KNAU decided to impose a provisional suspension on the Athlete:

"... As of today Simon Vroemen shall be excluded from participation in matches, competitions and events under the auspices of the Athletic Federation or any other sport federation competent in such matters. Furthermore, he shall be prohibited from providing training and carrying out supervisory activities during training sessions and/or competitions. The disciplinary measures shall apply until the decision of the Disciplinary Committee of the Institute for Sports Law becomes irrevocable" (translation from the Dutch original).

On 22 July 2008, the KNAU initiated the procedure against the Athlete before the Disciplinary Committee of the Dutch Institute for Sports Law ("*Instituut voor the Sportrechtspraak*", "ISR") regarding the breach of article 3.1 of the ISR Doping Regulation.

The Athlete presented before the ISR Disciplinary Committee a defence based on the following allegations:

- Breach of section 6.3.2 of the WADA International Standard for Testing (IST): the doping control performed in the lobby of the Wolvega Hotel on 14 June 2008 did not guarantee the athlete's privacy;
- Breach of section 9.3.3 IST: the samples' transportation to the Cologne Lab within the time period of four days could have led to degradation causing the adverse analytical finding;
- Breach of section 9.3.1 IST: the failure to keep the urine samples refrigerated during storage and transport could have led to degradation causing the adverse analytical finding;
- Breach of section 7.4.5 IST: the transport management form did not record the details of the Athlete that are required as a minimum;
- Breach of section 8.1 IST: the container including the sample bottles was not sealed with a red seal;

- Breach of section 5.2.4.3.2.2 of the International Standard for Laboratories (ISL): according to the Documentation Package of the Cologne Lab the persons who analysed the A sample were also involved in analyzing the B sample;
- Breach of section 5.2.5.1.1 ISL: according to the Documentation Package of the Cologne Lab the analysis report has not been independently signed by two scientists;
- the Athlete's legitimate use of Pulmicort (budesonide), duly reported on the Doping Control Form on 14 June 2008 and for which he had a TUE, could have led to the adverse analytical finding due to the degradation of the samples.

Following two interim decisions dated respectively 30 June and 27 October 2009, the ISR Disciplinary Committee issued its final decision on 28 January 2010, acquitting the Athlete. The Disciplinary Committee concluded as follows:

“On the basis of the aforementioned elements the disciplinary committee concludes that the ISL was not observed and that this violation of the ISL prescriptions must be deemed to have led to the incriminating analysis result. This incriminating analysis result therefore cannot serve as proof of the presence of a prohibited substance in the urine of the concerned party. The KNAU has not succeeded in proving that a violation of the Doping Regulations which they have declared has taken place. This means that the Disciplinary Committee will proceed to acquit the concerned party” (translation from the Dutch original, provided by the Appellant).

Subsequent to the acquittal of Mr. Vroemen, the ADAN filed an appeal before the competent ISR Appeal Committee (*“Commissie van Beroep van het Instituut voor de Sportrechtspraak”*) against the decision of the ISR Disciplinary Committee.

The ISR Appeal Committee held a hearing on 22 September 2010 and rendered its final decision on 10 November 2010 (the *“Appealed Decision”*), concluding as follows:

“The Appeals Committee comes to the conclusion that the person concerned has made an insufficiently reasonable case for the existence of a violation of the provisions of the IST and ISL and has insufficiently demonstrated that the use of Pulmicort resulted in a false positive analysis result. The Committee is of the opinion that the Doping Regulations were violated as reported.

The person concerned has committed a first violation as the warning he received earlier on did not originate from a disciplinary college and therefore needs to be left out of consideration. The penalty to be imposed is exclusion of the person concerned pursuant to article 38, section 1 of the 2009 Doping Regulations for a duration of two years, minus the period during which the person concerned was suspended” (translation from the Dutch original, provided by the Appellant).

On 30 November 2010, Mr. Vroemen filed a Statement of Appeal with the Court of Arbitration for Sport (CAS) against the KNAU.

On 13 December 2010, the Appellant filed his Appeal Brief together with several exhibits. He requested the CAS to set aside the Appealed Decision, acquit him of the anti-doping violation and lift the suspension.

On 16 December 2010, the ADAN filed a statement of intervention pursuant to article R41.3 of the Code of Sports-related Arbitration (the “CAS Code”).

By letter of 17 December 2010, the parties were informed of such request for intervention and invited to submit their position within a ten-day deadline.

On 20 December 2010, the KNAU replied that it did not have any objection to the request for intervention. The Appellant did not submit any objection within the required deadline.

On 5 January 2011, the KNAU filed its Answer (“Provisional Statement of Defence”) with the CAS Court office.

On 11 January 2011, the Deputy President of the CAS Appeals Arbitration Division admitted the intervention, stating as follows:

“... Doping Authority Netherlands is allowed to participate as co-Respondent, together with the Nederlandse Atletiek Unie in the arbitration procedure CAS 2010/A/2296 initiated by Mr. Simon Vroemen on 30 November 2010”.

On 4 March 2011, the Panel granted to the ADAN a twenty-day deadline to submit an Answer to the Appeal Brief.

On 25 March 2011, the ADAN submitted its list of witnesses, and confirmed the presence of Mr. Ram, by teleconference, at the hearing of 12 May 2011.

On 28 March 2011, ADAN submitted its Answer to the Appeal Brief.

The hearing took place on 12 and 13 May 2011 at the CAS premises in Lausanne, Switzerland.

The following expert witnesses were present at the hearing and were heard in person: Dr. Peter Koostra (called by the Appellant), Dr. Wilhelm Schänzer, Dr. Hans Geyer and Dr. Koen Terlouw (called by the Second Respondent). The following expert witnesses did not attend the hearing in person but, with the agreement of the parties and the Panel’s authorization, were heard via teleconference: Dr. J.G. Keunen and Dr. Rob Vreeken (called by the Appellant) and Dr. Christiane Ayotte (called by the Second Respondent).

The Panel heard the expert witnesses summoned by the parties in conference format – i.e. the experts were heard in the presence of the others and were given the possibility of interacting between themselves – through various segments of evidence dealing with the different scientific issues. Each expert witness heard by the Panel was instructed by the President of the Panel on, and expressly acknowledged, his/her obligation to testify truthfully subject to the consequences provided by Swiss law. All parties were given the opportunity to examine and cross-examine each expert witness.

At the hearing, the Second Respondent objected to the witness statement submitted on 9 May 2011 by Dr. Koostra, alleging that the statement contained new issues not raised in the Appeal Brief. The

Panel decided to admit such document and authorize the parties to submit by 27 May 2011 a post-hearing brief related to any new issues raised by Dr. Koostra in his report.

On 13 May 2011, in his final pleadings, the Appellant set forth new motions for relief which read as follows:

“... order to designate one or more independent experts to advise the Panel on the following:

- 1. The conditions and circumstances under which the sample of the Appellant has been transported and storage. More specific to give his (her) opinion about the consequences the freezing and thawing process, to which the sample of the Appellant has been submitted, might have had on the integrity of the sample of the Appellant.*
- 2. The validity and plausibility of the budesonide experiment of Dr. Rob Vreeken, the witness expert of the Appellant. More specific to advise the Panel on the claim of the Appellant that it is likely that the adverse analytical finding has been caused by the use of budesonide”.*

When asked to express their position on the relevant matter, the Respondents objected to these further requests. Following brief deliberation, the Panel denied the Appellant’s motion pursuant to article R56 of the CAS Code, which reads as follows:

“Unless the parties agree otherwise or the President of the Panel orders otherwise on the basis of exceptional circumstances, the parties shall not be authorized to supplement or amend their requests or their arguments, not to produce new exhibits, nor to specify further evidence on which they intended to rely after the submission of the appeal brief and of the answer”.

In the Panel’s view, the Appellant filed his new requests belatedly. Furthermore, the Appellant did not submit any exceptional circumstances that warranted the requests to be taken into account at this very late stage of the proceedings.

Upon closure, following the final pleadings, all sides expressly acknowledged that their right to be heard and to be treated equally had been respected by the CAS during the present arbitration proceedings.

By communication dated 16 May 2011, the CAS Court office reminded the parties of the deadline fixed by the Panel for the submission of the post-hearing briefs and requested within the same deadline the submission of a statement detailing their legal fees and expenses connected with the arbitral proceeding.

On the basis of these instructions, the parties filed post-hearing submissions as follows:

- On 24 May 2011, the First Respondent KNAU filed a submission in which it deferred to the defences raised by the Second Respondent with regard to technical issues and, with regard to costs, stated that *“a compensation for the costs of the CAS concerning the consideration of the appeal will suffice”.*
- On 27 May 2011, the Appellant, Mr. Vroemen, filed a post-hearing brief together with one exhibit; with regard to costs, the Appellant claimed only *“the repayment of the advanced costs for the arbitration paid by the Appellant and a compensation for the costs of the CAS with regard*

to the consideration of the appeal”; the Appellant specifically stated that, whatever the outcome of the case, each party should bear its own costs, especially in light of his much smaller financial means.

- On 27 May 2011, the Second Respondent ADAN filed a post-hearing submission including five exhibits, three of which were CAS awards quoted in the brief; with regard to costs, the Second Respondent submitted a detailed statement of legal fees and expenses, totalling 77,260.81 CHF.

None of the parties raised any objections, or requests to reply, to the other parties post-hearing briefs and attached exhibits. Accordingly, the Panel has integrally admitted into the case file the post-hearing submissions of all parties.

LAW

Admissibility of the Appeal

1. The appeal is admissible as the Appellant submitted it within the deadline provided by article R49 of the CAS Code and complied with all the other requirements set forth by article R48 of the CAS Code.

Jurisdiction

2. Article R47 of the CAS Code provides as follows:
“An appeal against the decision of a federation, association or sports-related body may be filed with the CAS insofar as the statutes or regulations of the said body so provide or as the parties have concluded a specific arbitration agreement and insofar as the Appellant has exhausted the legal remedies available to him prior to the appeal, in accordance with the statutes or regulations of the said sports-related body”.
3. Rule 53 of the ISR Doping Regulations sets forth the following arbitration clause:
“In case of suspected violations [...], an appeal may be filed to the CAS [...] only after all appeal options within the sport association have been exhausted. Such an appeal shall be subject to the conditions of the CAS” (translation from the Dutch original).
4. The final paragraph of the Appealed Decision read as follows:
“It is possible to lodge an appeal against the verdict of the Appeal Committee before the Court of Arbitration for Sport (CAS) in Lausanne (Switzerland)” (translation from the Dutch original).
5. The jurisdiction of the CAS, which is not disputed, has been acknowledged by all parties by signing the Order of Procedure.

6. It follows that the CAS has jurisdiction to decide on the merits of the present dispute and that the provisions of the CAS Code govern this procedure.
7. Under article R57 of the CAS Code, the Panel has full power to review the facts and the law and, thus, to hear the case *de novo*.

Applicable Law

8. The applicable law in the present arbitration is identified by the Panel in accordance with article R58 of the CAS Code which provides as follows:
“The Panel shall decide the dispute according to the applicable regulations and the rules of law chosen by the parties or, in the absence of such a choice, according to the law of the country in which the federation, association or sports-related body which has issued the challenged decision is domiciled or according to the rules of law the application of which the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision”.
9. The Panel observes that this case arises from an adverse analytical finding deriving from an out-of-competition anti-doping control performed on the Athlete by the Second Respondent ADAN on 14 June 2008. Accordingly, the “applicable regulations” in this case are the same which were applied in the national proceedings by the ISR Disciplinary Committee and the ISR Appeal Committee, that is, the ISR Doping Regulations – the relevant version *ratione temporis* is the one adopted by the ISR on 17 April 2007, in force at the point in time of Mr. Vroemen’s anti-doping control – which have been accepted by the KNAU and ADAN. The ISR Doping Regulations were also accepted by the Athlete, both when he registered with the KNAU and when he voluntarily underwent the said anti-doping control with a view to being selected for the 2008 Olympic Games. The ISR Doping Regulations are based on the WADC, although with different article numbers, and are applicable to all anti-doping controls managed by the ADAN in the Netherlands.
10. The WADA technical regulations – the International Standard for Laboratories (ISL), the International Standard for Testing (IST) and the WADA Technical Documents – are also applicable because they are incorporated by reference into the ISR Doping Regulations (see in particular articles 1.32, 12.2, 21.9 and 23.1). As correctly submitted by the Appellant, the applicable versions of the WADA International Standards are, *ratione temporis*, the ISL 5.0 of January 2008 and the IST 3.0 of June 2003.
11. Finally, pursuant to article R58 of the CAS Code, should the need arise, the Panel shall apply Dutch law on a subsidiary basis, given that the body which has issued the Appealed Decision is domiciled in the Netherlands.

Merits

12. The appeal brought by Mr. Vroemen against the decision of the ISR Appeal Committee raises many issues which the Panel must consider. In support of his request to be cleared from all charges brought against him, the Appellant is advancing three main submissions in order to invalidate the reported adverse analytical finding for a methandienone metabolite: the first submission is that several procedural violations in the anti-doping control process occurred before the samples arrived at the Cologne Lab; the second is that the Cologne Lab committed several procedural violations or mistakes in analysing his samples; the third is that the analyses performed on his samples do not support the reported adverse analytical finding. All three main submissions are then developed in several directions.
13. The first main submission is based on the allegation of various departures from the provisions set forth by the IST with respect to the sample collection, storage and transport, to the effect that the Athlete's samples suffered degradation. The second main submission stands on the allegation of a variety of departures from the ISL and/or WADA Technical Documents, and on the criticism of the analysis and evaluation procedures performed in the Cologne Lab (e.g. different analyst rule, validation for specificity, manual integration, confirmation of results). The third main submission is based on what can be termed as the "budesonide theory", according to which the ingestion of budesonide by Mr. Vroemen generated the deceptive finding of methandienone. The Panel will thus examine the merits of the case both in terms of procedural and substantive issues and shall consider each of the said questions separately.
14. Preliminarily, it must also be noted that the Appellant has complained about some documents that were not given to him by the Second Respondent. The latter has answered that some of those documents were in fact given to the Appellant while the delivery of the others is not required by any rule. Indeed, the Appellant has failed to indicate any specific rule that would have been violated in this respect. Be that as it may, the Panel observes that – as already indicated at the outset of the hearing – throughout these arbitration proceedings the Appellant has never submitted to the CAS any request for production of documents pursuant to article R44.3 of the CAS Code (in contrast, for example, from what happened in CAS 2009/A/1752-1753). Accordingly, the Appellant is not in a position to complain about documents he did not obtain and the Panel need not address such complaint on its merits.

A. Burden and Standard of Proof

15. The Panel remarks that, according to the applicable provisions of the ISR Doping Regulations (articles 11 and 12, modelled on article 3 WADC), when an adverse analytical finding is reported by a WADA-accredited laboratory, there is a presumption that the applicable International Standards (IST and ISL) were respected throughout the whole anti-doping process. The burden is thus on the athlete to establish, by a balance of probability, a departure from the IST or ISL either during the collection, handling and transport of the samples or during the analysis, custodial and review procedures in the laboratory. If the athlete does prove any such departure, the burden shifts back to the anti-doping organization to prove – to the comfortable satisfaction

of the hearing body, bearing in mind the seriousness of the allegation which is made – that the departure did not cause the adverse analytical finding.

16. In the case at stake, therefore, it is up to the Appellant to prove by a balance of probability that there were departures from the WADA International Standards in the anti-doping process. If a departure were proven, the burden of proof would shift to the Second Respondent to prove to the comfortable satisfaction of this Panel, bearing in mind the seriousness of the doping allegation, that the departure from a WADA International Standard did not cause the Appellant's adverse analytical finding.
17. By the same token, as the "budesonide theory" is an attempt at demonstrating that the Appellant's adverse analytical finding was wrongly reported by the WADA-accredited Cologne Lab, the related burden of proof lies with the Appellant and the applicable standard of proof is the balance of probability.

B. *The IST and Issues Related to Samples Collection, Storage, Documentation and Transport*

a) Samples collection and storage

18. With regard to the sample collection, the Appellant alleges a breach of his privacy during the sample collection session, and thus a violation of sections 6.3.2 and 7.1 IST, because the hotel lobby where the sample collection procedure took place was crowded. The DCO, in his testimony, denies that the hotel lobby was crowded and notes that only the paperwork was performed in the lobby, as the urine samples were actually delivered in a separately enclosed and secluded restroom.
19. The Appellant also alleges that he left the DCO alone with the samples while he went to collect his identification documents (allegedly his driver's licence) in his car parked outside the hotel. The DCO denies this circumstance and hence refutes this allegation.
20. The Panel observes, first and foremost, that the Athlete raised no prior objection to the place chosen by the DCO for the out-of-competition control. Then, the Panel notes that Mr. Vroemen signed the Doping Control Form – where it was clearly printed "*I declare that I am satisfied with the sample collection procedure*" and the "yes" box was ticked – without writing down any objection, the only exception being a remark on the absence of a (non-mandatory) red seal closing the container where the sample bottles were stored. In particular, the Doping Control Form records no hint of Appellant's concern in relation to privacy issues or to the DCO's collection and handling of the samples.
21. The Panel points out that, pursuant to section 7.4.4 IST, any athlete has the "*opportunity to document any concern he/she may have about how the Sample Collection Session was conducted*", and that section 7.4.6 IST provides that at "*conclusion of the Sample Collection Session the Athlete and the DCO shall sign appropriate documentation to indicate their satisfaction that the documentation accurately reflects the details of the Athlete's Sample Collection Session, including any concerns recorded by the Athlete*". It is fair to

assume that, as a very experienced athlete who has been tested on numerous occasions, Mr. Vroemen knew that he had the right to put on record his concerns – and indeed he did so with reference to the fact that the external container was not sealed.

22. With regard to the allegation that the samples were left unattended alone with the DCO, the Panel observes that the Appellant has never claimed that the samples were not his own, nor has he provided any evidence whatsoever that the samples were manipulated before the bottles were sealed. In addition, the Appellant has not provided any explanation as to the motives that would have induced the DCO to tamper with the samples in order to frame Mr. Vroemen, if suspicion had arisen. Also, the analyses performed in the laboratory did not yield the slightest evidence that the samples had been manipulated.
 23. As to the only concern recorded by Mr. Vroemen at the end of the sample collection session regarding the storage of the samples in a foam container lacking a red seal, the Panel remarks that, under the applicable rules, only the bottles containing the urine samples must be sealed, not the external foam container.
 24. In view of the above, the Panel finds that, on the balance of probability, the Athlete's allegations concerning the sample collection and storage procedure have not been proven. Therefore, the Panel must conclude that the anti-doping test performed by the DCO on the Athlete was properly carried out and that the samples were properly stored in sealed bottles and placed in a non-sealed external foam container in accordance with the applicable collection procedures.
- b) Samples documentation
25. In addition, the Panel does not concur with the Appellant's submission that the absence on the Doping Control Form of the Athlete's address and sport discipline (as indicated by section 7.4.5 IST) would invalidate the entire doping control. Indeed, the Panel finds the Athlete's argument to be excessively formalistic as the Athlete's address is of no relevance and as there has never been any doubt as to either Mr. Vroemen's identification or the sport discipline (very successfully) practiced by him.
 26. In any event, in the Panel's view, the already cited declaration signed by the Athlete that he was satisfied with the sample collection procedure cures any such minor documentation defect, which, as a consequence and in terms of the applicable rules, cannot even be regarded as a true "departure" from the IST. In any event, even if this lack of minor detail on the Doping Control Form were to be regarded as a true departure from the IST, the Panel would have no hesitation in finding that this could not influence the correct identification of Mr. Vroemen's samples and, therefore, could in no manner cause the adverse analytical finding.

c) Samples transport

27. Sections 9.3.1 and 9.3.3 IST read as follows:

“9.3.1 The ADO shall authorise a transport system that ensures Samples and documentation will be transported in a manner that protects their integrity, identity and security”.

“9.3.3 Sealed Samples shall always be transported to the WADA accredited laboratory or as otherwise approved by WADA, using the ADO’s authorised transport method as soon as practicable after the completion of the Sample Collection Session”.

28. With regard to the above IST rules relating to the sample transport, the Appellant maintains, on the one hand, that the transport was not done “as soon as practicable” and took too long and, on the other hand, that the unrefrigerated transport and the freezing and thawing of the samples – in particular, the A sample was frozen and thawed twice, whereas the B sample was frozen and thawed three times (the last one in the Cologne Lab) – had probably led to the degradation of the sample and, thus, to the impossibility of using it to report an adverse analytical finding. This allegation was vehemently underscored by the Appellant’s expert witness, Prof. G. Kuenen, during the hearing.

29. It is important to note that such alleged degradation is also considered by the Appellant to be the starting point of what can be termed as the “budesonide theory”, according to which the alteration of the urine is the source of the chemical transformation of budesonide into a metabolite which could be misidentified as the metabolite of methandienone (see *infra*).

ca) Time of samples transport

30. As to the time which elapsed during shipment of the samples, the Panel notes that on the whole the storage, transport and delivery of the samples took three and one-half days, a large portion of this time taking place over the weekend. Indeed, after the sample collection procedure ended on Saturday, 14 July 2008 at 19:30, the DCO held the samples frozen in his home refrigerator until Monday morning, when he shipped them by means of a courier service to the ADAN offices; on Tuesday morning the samples were received by the ADAN, which several hours later shipped them again by a courier service to the Cologne Lab, where they were received in the early morning of Wednesday 18 July 2008.

31. In the Panel’s view, the time taken between the end of the sample collection and the arrival of the urine at the Cologne Lab does not constitute an unacceptable period of transport and certainly cannot be characterized as being “too long” in terms of the IST. This time-frame is arguably not ideal but it is in line with common testing practice, especially when sample collection occurs far away from a WADA-accredited laboratory. Therefore, the Panel is of the opinion that the IST requirement that the samples be transported “as soon as practicable” was not violated, especially considering that most courier services do not operate on Saturday evening or Sunday.

cb) Conditions of samples transport

32. With regard to the potential degradation of the samples resulting from the transport and storage conditions before their arrival at the Cologne Lab, the Panel remarks, firstly, that no IST rule requires that the samples be cooled when transported and no IST rule prohibits freezing and thawing between collection and delivery to the laboratory. Therefore, no IST rule was violated in this regard.
33. Given different circumstances, the Panel might find a departure from the IST if the Appellant were to prove that the samples were treated in a manner that did not protect “*their integrity, identity and security*” (see Section 9.3.3 IST, quoted *supra*). Given that no objections have been raised by the Appellant regarding the identity and security of the samples, the issue at stake here is whether the “integrity” of the Appellant’s samples might have been impaired to a point that the credibility of the analytical findings is jeopardized.
34. The Panel notes that the Cologne Lab has attested that the (anonymous) sealed samples were received in good condition and that no sign whatsoever of degradation was observed in the analyses it performed. The Second Respondent’s expert witnesses indicated that several factors – Ph value, steroid profile, gravity, turbidity, T/E ratio, colour and odour – allow the conclusion that Mr. Vroemen’s samples were not degraded. In this respect, the Panel further remarks that none of the Appellant’s experts asserted that Mr. Vroemen’s samples showed any sign of degradation. Both the Appellant and Dr. Vreeken were present at the opening of the B Sample.
35. With regard to cooled transport, all experts agreed that, in order to avoid deterioration, it would be preferable to transport samples in a cooled container, but this suggestion – advocated in several scientific papers – has not yet been explicitly addressed by the WADA. The Panel has been persuaded by the evidence heard and examined that, in principle, cooled transport would be preferable, because it would deter the deterioration of some samples (which would render them unusable for anti-doping purposes). However, in the present case, there is no evidence that the unrefrigerated transport had any effect on the samples. Indeed, the Second Respondent showed to the comfortable satisfaction of the Panel that during the relevant period of time the external temperatures were never extreme (the meteorological temperatures in the interested geographical area varied between a minimum of about 4 degrees Celsius and a maximum of about 20 degrees Celsius). In addition, the Panel notes that during the three and a one-half days of transport, the samples stayed frozen almost half of the time. Furthermore, the Panel notes that it is required by the ISL that the samples be kept frozen in the anti-doping laboratories.
36. With respect to the freezing and thawing of the samples, Dr. Ayotte vehemently insisted in her testimony that, on the basis of her experience as director of the WADA-accredited Montreal anti-doping laboratory, the freezing and thawing of samples is not a problem at all – she even praised the DCO for having frozen the samples during the week-end – and that, at any rate, this practice could never yield the finding of methandienone metabolites. In fact, samples stored at anti-doping laboratories are sometimes submitted to freezing and thawing cycles over years. On the other hand, one Appellant’s expert witness, Prof. Keunen, stated that a non-refrigerated

transport and two freeze-thaw cycles might yield unpredictable results, but conceded upon questioning that, in case of a multiple freezing and thawing of a sample, there would be no more than a 1% chance of deterioration.

37. In the Panel's view, the degradation of the samples due either to the temperature at which they were transported or to freezing/thawing is only a speculative assumption made by the Appellant's experts, respectable as such in general terms, but uncorroborated in any manner by scientific evidence concerning the actual samples analysed by the Cologne Lab. Mere speculation that something might have occurred is not probable proof that it did actually occur.
38. In other terms, the Panel was not persuaded by the evidence submitted that, on the balance of probability, the integrity of the Appellant's samples was impaired by the conditions of storage and transport. Indeed, according to CAS case law, in order to meet the "balance of probability" standard of proof, the athlete alleged to have committed a doping violation bears the burden of persuading the judging body that the occurrence of a specified circumstance on which he relies is more probable than its non-occurrence (see CAS 2006/A/1067, para. 6.4; CAS 2008/A/1515, para. 116). It does not appear to the Panel that the alleged degradation of Mr. Vroemen's samples is more probable than its non-occurrence.
39. The Panel, therefore, finds that there has been no departure from sections 9.3.1 and 9.3.3 IST relating to the conditions of transport and storage of the Appellant's samples and that, in particular, they were not affected by degradation.

C. *The ISL and Issues Related to the Cologne Lab's Analyses of the Appellant's Samples*

40. The Appellant alleges that a variety of departures from the ISL and/or some relevant WADA Technical Documents occurred in the Cologne Lab during the sample analysis and that, in any event, the B sample analysis was incorrectly done.
 - a) Different analyst rule
41. The Appellant alleges that Ms. Schreiber was involved in the analysis of both the A and B samples; accordingly, he claims that the Cologne Lab violated the "different analyst rule" provided by section 5.2.4.3.2.2 ISL:

"The "B" Sample confirmation shall be performed in the same Laboratory as the "A" Sample confirmation. A different analyst(s) shall perform those parts of the "B" analytical procedure during which the Sample or Aliquot is open and accessible. Analyst(s) involved in the analysis of the "A" Sample may participate in an activity that does not involve direct interaction with the open Sample Aliquot. For example, the same individual(s) that performed the "A" analysis may perform the instrumental performance checks and analysis, transfer sealed vials, move sealed tubes containing Samples, complete paperwork, transfer vials to and from auto-samplers, enter sequence data and verify results".

42. The Panel is mindful that this is an important ISL rule, which, if not respected, may lead to the acquittal of an athlete charged with a doping offense (see for example TAS 2006/A/1119 or AAA No. 30 190 00199 07 *USADA v. Jenkins*).
43. However, contrary to what the Appellant argues, the prohibition set forth by section 5.2.4.3.2.2 ISL does not cover any kind of activity performed by laboratory analysts. In the Panel's view, section 5.2.4.3.2.2 ISL precludes any analyst who has actually entered in *direct physical contact* with the opened A sample or aliquot from performing operations which require direct physical interaction with the opened B sample or aliquot. As the TAS 2006/A/1119 award made clear, the different analyst rule is violated when the same analyst has actually touched or manipulated both the A and B samples (*"si le même analyste avait touché/manipulé les échantillons A et B"*, TAS 2006/A/1119, para. 100). The *Jenkins* award, quoting approvingly the TAS 2006/A/1119 award, indicated that the prohibited activity was the *"touching, handling or manipulating"* of both samples by the same analyst (AAA No. 30 190 00199 07 *USADA v. Jenkins*, para. 134). The same notion has been expressed, albeit with different words, in the CAS 2009/A/1752-1753 award, which made reference to the *"direct interaction"* with an open sample or aliquot (para. 5.173).
44. All other analysts' activities are permitted, even if they imply being involved with both samples. In particular, the list of permitted activities included in the last sentence of the above rule is only illustrative and may be extended to other activities, as long as the above described preclusion from direct interaction with both open samples/aliquots is respected.
45. The Panel notes that, according to the Cologne Lab's records (which were formed at the time of the analyses and whose authenticity has not been disputed by the Appellant), Ms. Schreiber was involved in the Appellant's samples testing procedure as being *"responsible for sample reception and pre-analysis procedure"*. In particular, according to the *"documentation of shipping and receipt of intact sample"* of the Cologne Lab's chain of custody documentation, Ms Schreiber was responsible for the acceptance, registration and secured storage of both samples. No document contained in the whole of the Cologne Lab's Documentation Package indicates that Ms Schreiber opened the A sample or performed any activity on the A sample or aliquot while this was open and accessible.
46. The Appellant gives weight to the fact that Ms Schreiber signed the external "chain of custody urine samples" form prepared by the Second Respondent, which accompanied the container including Mr. Vroemen's sample bottles, because such form at one point reads: *"To be filled by anyone to whom custody of samples is transferred or who breaks the seal"* (emphasis added). However, this Appellant's argument is misplaced because the form includes three sections: the first is entitled *"To be filled in by the Doping Authority"*, the second is entitled *"To be filled in at the laboratory"* and the third one is entitled as quoted above (*"To be filled by anyone to whom custody of samples is transferred or who breaks the seal"*). Ms Schreiber's signature is included in the second section, not in the third one, and it merely attests to the fact that the samples were received in Cologne on 18 July 2008 at 08:27 am and, specifically, that they were "intact".

47. The Panel also remarks that the internal Cologne Lab's chain of custody documentation indicates that the staff members involved in the aliquoting and analysis of the A sample were the following: Scharf, Voß, Wachsmuth, Schmechel, Bendfeld and Fußhöller. None of them appears to have been involved in the aliquoting and analysis of the B Sample.
 48. The above circumstances are confirmed by Ms Schreiber's witness statement. In this respect, the Panel notes that the Appellant had the possibility to cross-examine Ms. Schreiber during the two-day hearing, but he did not make use of such opportunity.
 49. On the basis of the evidence before it, the Panel finds that the Appellant did not satisfy his burden of proving, on the balance of probability, that Ms Schreiber entered into direct physical contact with the open A sample or aliquot and, consequently, that she was therefore prohibited from participating in the B sample analysis. As a result, the Panel finds that there has been no departure from section 5.2.4.3.2.2 ISL. The Appellant's submission based on the "different analyst rule" thus fails.
- b) Validation for specificity and related documentation
50. The Appellant claims that the detection method for methandienone used by the Cologne Lab has never been validated for specificity, in breach of section 5.4.4.2.1 ISL. With regard to the documentation, the Appellant complains that the Cologne Lab's test reports were flawed because they did not include the ISO accreditation number, and that he has never received from the Cologne Lab the Standard Operating Procedures (SOPs) in order to verify the validation for specificity of the methandienone test.
 51. The Panel recalls that, pursuant to articles 12.2 of the ISR Regulations (based on article 3.2.1 of the WADC), WADA-accredited laboratories are presumed to have conducted sample analyses in accordance with the ISL; however, such presumption can be rebutted by the party challenging the conduct of the analyses.
 52. The Panel notes that it is common ground between the parties that methods for the detection of prohibited substances need to be validated. Only methods which are scientifically "*fit for purpose*" can be applied to analyze samples in the fight against doping. In this regard, the Panel notes that the Cologne Lab is a WADA-accredited laboratory. In order to obtain such accreditation, laboratories must obtain, among other conditions, the ISO17025 accreditation for the quality system and methods used and must comply with the ISL and the related technical documents.
 53. It is uncontested that the Cologne Lab holds the ISO17025 accreditation. The Panel is of the opinion that a CAS panel cannot place in question whether an ISO accreditation was correctly attributed to a laboratory, because this would render the whole international standardization and certification system meaningless and because, notoriously, compliance with ISO accreditation requirements is regularly checked by external auditors. However, a CAS panel may

certainly verify whether a given method used by a laboratory is covered by the accreditation or not.

54. In this respect, the Panel notes that the quality manager of the Cologne Lab – Dr. Andrea Gotzmann – has attested in writing that the method for the detection of the relevant methandienone metabolite was implemented in May 2007 into an already existing method (first developed in January 2004), after the whole process of validation had been performed and successfully completed. He confirms that, in particular, the specificity of the said detection method has been monitored and validated, and that the whole method is fully validated and accredited by ISO17025.
55. The Panel observes that the Cologne Lab performed the analyses on the Appellant’s samples using two distinct methods, both of which are validated and have revealed the presence of a methandienone metabolite. The A sample was analysed with the GC-MS/MS screening, while the B sample analysis was performed using the LC-MS/MS method. The Panel finds that the specificity of these methods is recognized by the scientific community, as attested by the official German Accreditation Body (“Deutsche Akkreditierungsstelle GmbH” or “DAkkS”), which, with reference to the methods used in the case at hand to detect the methandienone metabolite #7, has stated as follows in the last paragraph of a letter sent to the Cologne Lab and exhibited by the Second Respondent:
“Both methods were published in 2006 hence well in advance to the measurement of the sample and issue of the test reports. That means that these test methods fell under the scope of accreditation at the time the samples were analysed. This fulfils the requirements for flexible scope of accreditation of the WADA Standard for Laboratories 5.0 (clause 4.4.10), which came into effect on 1st January 2008, too” (letter of 25 May 2011, signed on behalf of DAkkS by Dr. Christian Lehmann, Customer Manager).
56. In short, the Panel is comfortably satisfied that the methods used by the Cologne Lab to detect the methandienone metabolite #7 were validated and fell within the scope of the accreditation. Stated differently, the Panel finds that the Appellant has not submitted evidence which could establish, on a balance of probability, that either method is not validated for specificity. As a result, the Panel holds that the Appellant did not establish any departure from the relevant ISL provision.
57. With regard to the documentation, firstly, the Panel notes that the already quoted DAkkS’s letter (*supra*) clarifies that, contrary to the allegation made by the Appellant’s expert Dr. Koostra, there is no obligation for an accredited laboratory to include in the test reports an express reference to the ISO accreditation symbol and number.
58. Then, with regard to the Appellant’s grievance that he has not received the Cologne Lab’s SOPs, the Panel notes that no rule obliges the Cologne Lab to deliver the Laboratory’s SOPs. In fact, pursuant to the WADA Technical Document TD2003LDOC, *“the Laboratory is not required to support an Adverse Analytical Finding by producing standard operating procedures, general quality management documents (e.g., ISO compliance documents) or any other documents not specifically required below”*.

59. However, the Panel remarks that the above WADA provision does not and may not preclude a CAS panel, if the conditions set forth by article R44.3 of the CAS Code are met, from ordering an anti-doping organization to produce specified and relevant extracts from the SOPs of a WADA-accredited laboratory, as was made abundantly clear in CAS 2009/A/1752-1753.
 60. However, as already pointed out, the Appellant did not invoke article R44.3 of the CAS Code and failed to file a formal demand for production of relevant items of the Cologne Lab's SOPs. Therefore, the Appellant's submission related to his not having received the SOPs fails.
- c) Manual integration of the mass spectrometry result
61. The Appellant claims, in addition, that the Cologne Lab violated the WADA Technical Document TD2003IDCR in relation to the manual integration of the mass spectrometry result. According to the Appellant, no acceptable justification was given for the manual integration of the peak area relating to the ion transition 299/121, which allegedly led to the adverse analytical finding of the B sample analysis. Specifically, the Appellant contends that the B sample test should have been declared negative, as the Cologne Lab violated the provision of WADA TD2003IDCR stating that "*it is not acceptable to utilize a technique that changes only the relative abundance of the same mass ions*" (page 3 of TD2003IDCR). The Appellant's expert, Dr. Koostra, acknowledged at the hearing that in several situations manual integration is needed if the automatic integration does not properly work, but such manual integration should be justified.
 62. The Second Respondent counters by underlining that the Appellant has incompletely quoted the provision of TD2003IDCR. This provision cannot be invoked in the case at hand because it is applicable only if "*unique diagnostic product ion(s) are not available*" (page 3 of TD2003IDCR). This, it is claimed, is not the case here. The Second Respondent remarks that, with respect to the detection of a methandienone metabolite in the Athlete's B sample, no fewer than four unique diagnostic ions were selected and compared with their relative abundance. As a consequence, the Second Respondent stresses that the manual integration of the 299/121 ion transition of Mr. Vroemen's B sample was done, in its entirety, in compliance with WADA TD2003IDCR. The Second Respondent also remarks that, according to WADA TD2003IDCR, three ion transitions are sufficient to detect an adverse analytical finding and the fourth ion transition was thus not even necessary.
 63. The Second Respondent's expert witnesses, Dr. Ayotte and Dr. Schänzer, have stated that the manual integration for the ion transition 299/121 was perfectly justified due to automated setting of an incorrect baseline which artificially increased the relevant peak area. Following the manual correction of the baseline, the peak area for ion transition 299/121 also conformed to the relative abundance criteria already shown by the peak heights. Dr. Schänzer and Dr. Ayotte explained that such manual integration is standard practice in all laboratories and it is commonly done on the basis of the experience of the analyst involved, prior to knowing whether the correction would yield an adverse analytical finding.

64. The Panel points out that, as a result of the experts' discussion at the hearing, this issue has become somewhat moot, as it became clear that the adverse analytical finding would have been established even without the manual integration. This was acknowledged by all experts at the hearing as well as, correctly, by the Appellant in his post-hearing brief.
 65. Indeed, the Panel notes that WADA TD2003IDCR clearly states that the relative abundance of a diagnostic ion may be determined from either a "peak area" or a "peak height" of integrated selected ion chromatograms. In the case at hand, the relative abundance related to the *peak height* of all four diagnostic ions shown by the analysis of the B sample would have been sufficient to yield an adverse analytical finding even without the manual integration. Therefore, the Panel holds that the whole Appellant's argument based on the manual integration fails.
 66. Based on the above and the evidence submitted, the Panel is of the view that the Appellant has not proven, on the balance of probability, that the manual integration performed by the Cologne Lab on the ion transition 299/121 – in relation to the B sample of Mr. Vroemen – violated the criteria set forth by WADA TD2003IDCR.
 67. Likewise, the Panel is not persuaded by Mr. Vroemen's complaint that, while in the A sample analysis only three diagnostic ions were monitored, in the analysis of the B sample an additional ion transition – a fourth one, the 299/173 ion transition – was invalidly acquired. In fact, the Panel notes that under WADA TD2003IDCR "*at least*" three diagnostic ions must be monitored in order to determine the relative abundance and, eventually, to report an adverse analytical finding. Consequently, laboratories are not precluded from monitoring additional ion transitions either in the A or in the B sample. Also this Appellant's submission thus fails.
- d) Identification of the prohibited substance in the B sample
68. The Appellant claims, on the basis of Dr. Vreeken and Dr. Koostra's review of the Cologne Lab's operations, that the B sample analysis should not be considered as yielding an adverse analytical finding, because it did not show the same exact results as the A sample analysis and, in particular, because in the B sample chromatogram an extra peak is shown which is very clear in the ion transition 299/173. According to Dr. Koostra, a validated method should give exactly the same results for both samples and allow reproducibility of the whole pattern.
 69. In this regard, the Panel first notes that methandienone or its metabolite is a non-threshold prohibited substance, i.e., a substance whose presence in a sample determines an adverse analytical finding regardless of the quantity detected. As a consequence, in the case at hand section 5.2.6.7 ISL applies:
"The Laboratory is not required to measure or report a concentration for Prohibited Substances for a non-threshold analyte in urine Samples. The Laboratory should report the actual Prohibited Substance(s), Metabolite(s) of the Prohibited Substance(s) or Method(s), or Marker(s) detected in the Sample".
 70. Then the Panel notes that section 5.2.4.3.2.3 ISL reads as follows:

“The ‘B’ Sample result shall confirm the ‘A’ Sample identification for the Adverse Analytical Finding to be valid”.

71. In the Panel’s view, these ISL provisions make clear that, in the case of a non-threshold substance such as methandienone, the laboratory method for analyzing the B sample is not aimed at having identical analytical results or at gaining information on the background or the quantification, but only at confirming the presence of the prohibited substance. In other terms, the ISL only requires the *identification* in the B sample of the same prohibited substance that was found in the A sample, and it does not require the chromatograms or the quantities or the “background noises” to be exactly the same.
 72. The Panel has formed the opinion, particularly on the basis of Dr. Ayotte’s persuasive expert testimony, that the additional peaks found in the chromatogram of the B sample are irrelevant as they did not interfere with the 6.75 retention time and, accordingly, there was no interference with the adverse analytical finding of a methandienone metabolite. As Dr. Ayotte vividly put it, the extra peak’s retention time signalled by the Appellant’s experts is “miles away”, in chromatographic terms, from the retention time relevant for the finding of a metabolite of methandienone.
 73. As a result, the Panel holds that that the Appellant has failed to prove, on the balance of probability, that the B sample analytical results did not confirm the A sample’s adverse analytical finding.
- e) Review process
74. The Appellant claims that the Cologne Lab’s review process violated section 5.2.5.1.1 ISL because: (i) the review has not been conducted *independently* as the certifying scientists of the B sample were also involved in the analysis procedure of the same sample; (ii) the review procedure has not been recorded including all the minimum elements stated at section 5.2.5.1.2 ISL.
 75. Section 5.2.5.1.1 ISL reads as follows:
“A minimum of two certifying scientists shall independently review all Adverse Analytical Findings and Atypical Findings before a report is issued. The review process shall be recorded”.
 76. Much of the parties’ debate has focused on the interpretation of the term “independently”. In the Panel’s view, this provision must be construed in the sense that the two certifying scientists must conduct the review “separately” from each other. In other words, they must not work together in reviewing the adverse analytical findings or the atypical findings.
 77. The Panel notes, in support of this interpretation, that section 5.2.5.1.1 ISL does not state that the certifying scientists must not have anything to do with the analytical work they are reviewing. In the Panel’s opinion, if WADA wished to impose upon the laboratories a “different scientist rule” – in the sense that a scientist involved in the analytical procedure or, more generally, in

the concerned laboratory, may not be involved in the review process – it would have drafted a clear rule to that effect, analogous to the “different analyst rule” set forth in section 5.2.4.3.2.2 ISL (cf. *supra*). However, WADA chose not to do so and, as attested in a WADA’s letter exhibited by the Second Respondent, preferred to draft a rule which only requires that two certifying scientists review the data independently of each other, with no specific requirement preventing the certifying scientists from being involved in any part of the samples analysis. Such legislative intention has also been confirmed at the hearing by Dr. Ayotte, who personally contributed to the drafting of the ISL.

78. The Panel is of the view that it cannot go beyond the intention of the legislating body and it must adhere to what is in the text of the regulation, drawing from the regulation’s silence the unwillingness of the legislator to require more than what is expressly stated (*ubi lex voluit dixit, ubi noluit tacuit*; see CAS 2006/A/1152, at para. 8.8).
79. As to the recording of the review process, the Panel notes that section 5.2.5.1.1 ISL simply requires that the review process be recorded. It does not require the use of a particular format and it does not specify how the review process should be recorded and what details it should include. The Panel also notes that the already quoted WADA Technical Document TD2003LDOC does not require WADA-accredited laboratories to include a review process report in the Documentation Package.
80. It seems to the Panel that the review process required by section 5.2.5.1 ISL is a form of internal quality control, the purpose of which is to serve as a final check of the correct execution of the prescribed analytical procedures and of the other quality assurance measures that underlie good analytical practice. Such internal quality control, therefore, is necessarily retrospective and must be done by the laboratory to ensure that an adverse analytical finding has been correctly detected and documented before reporting it externally. As a consequence, a defective review process can impair a laboratory’s reputation and even cause it to lose its accreditation but, by definition (given that it is retrospective), it cannot cause, in itself, the adverse analytical finding.
81. In light of the above, the Panel is of the opinion that in order to comply with section 5.2.5.1.1 ISL, it is sufficient that, for each adverse analytical finding, two certifying scientists attest in writing, without particular formal requirements, that they have conducted the said review process, with no need of citing in writing all the elements listed in section 5.2.5.1.2 ISL.
82. In the case at stake, there is written evidence on file that Dr. Ute Marek and Dr. Gregor Fußhöller (whose signatures appear on the Cologne Lab’s document entitled “*Check-Liste zum Bericht positive A-Proben*” and dated 25 June 2008) reviewed the A sample analytical procedure, while Dr. Hans Geyer and Dr. Andreas Thomas (whose signatures appear on the Cologne Lab’s document entitled “*Sequenz-Deckblatt*” and dated 15 July 2008) reviewed the B sample analytical procedure. Each scientist has also declared in writing to have duly performed the review process independently of each other. The fact that different forms were used to record the review processes of the A and B samples and that not all details were noted down in those forms is in the Panel’s view irrelevant; what is relevant is that there exists a document attesting that the review process occurred.

83. The Panel thus finds that the Cologne Lab has recorded the performance of the review process for both the A sample and the B sample by two scientists acting separately of each other for each sample. Accordingly, the Panel holds that the Appellant has not established on a balance of probability a departure from section 5.2.5.1 ISL.

D. *The “budesonide theory”*

84. The Appellant’s expert witness, Dr. Vreeken, states that, on the basis of experiments that he conducted, he cannot exclude that the Athlete’s ingestion of Pulmicort (i.e., budesonide, for which he had, at that time, obtained a TUE as an anti-asthma medication) prior to the anti-doping control, coupled with the degradation of his urine during transportation, could have led to a false positive result. This could have occurred through the chemical transition of a budesonide metabolite, in particular 16-Hydroxyprednisolone, into a metabolite which closely resembles the metabolite of the prohibited substance methandienone. The Appellant claims that the absence of budesonide in his urine is clear evidence of the transformation of the said steroid into a metabolite which has been mistakenly identified by the Cologne Lab as a methandienone metabolite.
85. The Appellant has invested much time and effort into presenting his defence based on the budesonide theory. However, after having reviewed the entire file, the Panel has formed the view that such theory is worthy of interest. For the time being, however, it is a mere theory not sufficiently corroborated by the adduced and available evidence.
86. First of all, the Panel notes that the Appellant’s entire budesonide defence rests on the fundamental assumption that he took Pulmicort (budesonide) on the day of the sample collection or on the previous day. Indeed, Dr. Ayotte testified, without being challenged on this point by any other expert witness, that budesonide leaves the body quite quickly and cannot be detected in the urine 45 hours after consumption.
87. However, Mr. Vroemen himself declared on the Doping Control Form that he had taken budesonide on 11 June 2008 (the day of the race in Cottbus, see *supra*), i.e., three days before he underwent the doping test. Considering that the sample collection occurred at 19:15 on 14 June 2008, even assuming in Mr. Vroemen’s favour that he consumed budesonide just before midnight on 11 June 2008, the time which transpired constitutes an interval of no less than 67 hours. As a result, the Panel finds that residues of budesonide could not have been detectible in the Appellant’s samples and, hence, could never have been transformed into something similar to a methandienone metabolite.
88. Then, another fundamental assumption of the budesonide theory is that the samples suffered degradation because they were transported at a warm temperature and were frozen and thawed several times. However, the Panel has already found that there is no evidence whatsoever that the Appellant’s samples suffered degradation because of the transport conditions (see *supra*).

89. In this connection, it is not necessary for the Panel to assess the credibility *per se* of the experiment conducted by Dr. Vreeken, because such experiment is not comparable with the real-life situation which has taken place with regard to the Appellant's samples. As a matter of fact, Dr. Vreeken has declared that, in his experiment, he "cooked" overnight the volunteers' urines in an oven at 50 degrees Celsius in order to reproduce the alleged degradation of Mr. Vroemen's urines. The Panel notes that, in the absence of any evidence that Mr. Vroemen's urines degraded during transportation, Dr. Vreeken's experiment is of no avail to demonstrate that the Appellant's ingestion of budesonide generated a false positive result for a methandienone metabolite.
90. In addition, the Panel notes that both Dr. Schänzer and Dr. Geyer have testified that, after the budesonide theory was put forward by the Appellant, the Cologne Lab initiated several surveys in order to see if they could find some evidence in support of the budesonide theory:
- Firstly, they re-evaluated 1,565 competition samples analysed in 2008 for corticosteroids. The analysts detected budesonide and/or its metabolites in 35 samples and in none of them could they detect methandienone metabolites or signals interfering with methandienone metabolite #7.
 - Secondly, they re-evaluated 51 cases of methandienone metabolite #7, analysed before 2009, and in none of those samples could they find traces of budesonide or its metabolites.
 - Thirdly, in experiments they made with urine samples containing budesonide and its metabolites, stored for three days at 40° C, they could not detect anything which could be mistaken for methandienone metabolite #7.
 - Then, they reviewed the 13,474 samples analysed by the Cologne Lab in 2010; there were 38 samples containing methandienone metabolite #7, and they found that in none of those 38 cases had the athlete declared on the Doping Control Form the use of budesonide or a medicament containing budesonide.
91. In the Panel's view, the results of the above surveys show that the Appellant's argument based on the budesonide theory has been a speculative venture, far from being proven to a sufficient degree of credibility (i.e., more probable than not). Even Dr. Vreeken, who performed the mentioned experiment, chooses not to affirm with resoluteness the reliability of the budesonide theory; he merely qualifies his conclusion at the end of his expert report with the formulation that he "*cannot exclude*" that the Appellant's adverse analytical finding was related to his ingestion of budesonide (see *supra*). Indeed, at the hearing, the Appellant's counsel himself conceded in his closing statement that his party had not really proven that budesonide had caused the positive result for methandienone.
92. In conclusion, the Panel holds that the Appellant has not satisfied his burden of proving, in accordance with the balance of probability standard, that his adverse analytical finding derived from his legitimate ingestion of budesonide before the anti-doping control.

Anti-doping violation and sanction

93. As a result of all of the above considerations, the Panel, in evaluating the evidence submitted by the parties, holds that the Respondents have discharged their burden of proving to the comfortable satisfaction of the Panel, bearing in mind the seriousness of the allegation, that a metabolite of methandienone was present in the Athlete's urine samples. Methandienone and its metabolites are prohibited substances as evidenced by their inclusion in the Prohibited List in force at the time of the offence.
94. Mr. Vroemen has, therefore, committed a violation of article 3.1 of the ISR Doping Regulation (modelled on article 2.1 WADC).
95. Under Article 38.1 of the ISR Doping Regulation, the sanction for a first offence resulting from the use of a prohibited substance in violation of Article 3 of the ISR Doping Regulation is the Athlete's ineligibility for two years.
96. The Second Respondent has pointed out that the Athlete was already sanctioned with a warning in 2004 due to an adverse analytical finding for budesonide. Therefore, according to the Second Respondent, as this offense is a second violation, the Panel has discretion to impose a sanction of ineligibility on the Athlete of up to three years under article 41.3 of the ISR Doping Regulation.
97. The Panel takes the position that such a request to consider an increase to the sanction imposed by the Appealed Decision is to be considered tantamount to a counterclaim. However, under the version of the CAS Code in force at the time of filing the Statement of Appeal (contrary to the version in force until 31 December 2009), the Respondent is precluded from introducing such a counterclaim. Stated differently, the Respondent is entitled to request no more than the confirmation of the sanction of two years imposed by the Appeal Committee of the Dutch Institute for Sports Law.
98. As a consequence, even if the Appellant's violation were to be qualified as a second violation, the sanction would be, in any event, two years which is the minimum sanction for a second violation under article 41.3 of the ISR Doping Regulation.
99. As the Athlete has denied having ingested methandienone, he has consequently not suggested any reason for a reduction of the sanction (for example on the grounds of no significant fault or negligence).
100. Accordingly, the Panel upholds the sanction already imposed by the Appealed Decision and holds that the Athlete shall be subject to a two-year period of ineligibility, starting as of 10 November 2010, minus the period of provisional suspension already imposed on the Athlete by the KNAU from 21 July 2008 to 28 January 2010.
101. For all of the above reasons, the Panel holds that Mr. Vroemen's appeal must be dismissed.

102. All other motions or prayers for relief are rejected.

The Court of Arbitration for Sport rules:

1. The appeal filed by Mr. Simon Vroemen against the decision issued on 10 November 2010 by the Appeal Committee of the Dutch Institute for Sports Law is dismissed.
2. The decision issued on 10 November 2010 by the Appeal Committee of the Dutch Institute for Sports Law is hereby confirmed.
3. Mr. Simon Vroemen is declared ineligible for a period of two years, starting from 10 November 2010, whereby the period of ineligibility already served by Mr. Vroemen on the basis of the decision of the KNAU dated 21 July 2008 shall be credited to this sanction.

(...)

6. All other requests, motions or prayers for relief are rejected.